

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed September 8, 2005. Claims 1-27 were pending in the Application. In the Office Action, Claims 1-13 were rejected, and Claim 14-27 were withdrawn from consideration. Thus, Claims 1-13 remain pending in the Application. Applicants respectfully request reconsideration and favorable action in this case.

In the Office Action, the following actions were taken or matters were raised:

RESTRICTION/ELECTION

Claims 14-27 are treated by the examiner as having been withdrawn.

SPECIFICATION OBJECTIONS

The Examiner objected to the title of the invention. In this regard, the Examiner states that the "title of the invention is not descriptive" (Office Action, page 4). Applicants respectfully disagree. Claims 1 and 9 each recite and are directed toward an "electronic circuit assembly test apparatus, comprising" The title of the instant Application recites "Electronic Circuit Assembly Test Apparatus." Accordingly, Applicants submits that the title is descriptive an indicative of the invention to which the claims are directed. Therefore, Applicants submit that this objection is improper and should be withdrawn.

SECTION 102 REJECTIONS

Claims 1 and 3-13 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,373,268 issued to Dunlap et al. (hereinafter "*Dunlap*"). Claims 1-13 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,094,056 issued to Bardsley et al. (hereinafter "*Bardsley*"). Applicants respectfully traverse these rejections.

Dunlap Reference

Of the claims rejected under the *Dunlap* reference, Claims 1 and 9 are independent. Applicants respectfully submit that *Dunlap* does not disclose or even suggest each and every limitation of independent Claims 1 and 9. For example, independent Claim 1 recites “a support member having a plurality of probes, each probe adapted to contact a corresponding test area of an electronic circuit assembly” and “a probe assembly coupled to the support member, the probe assembly having a plurality of probes, wherein a spacing density of the probes of the probe assembly is greater than a spacing density of the probes of the support member” (emphasis added).

In the Office Action, the Examiner refers to the contactor 202 of *Dunlap* as corresponding to the “support member” recited by Claim 1, and the cabling ring 206 of *Dunlap* as corresponding to the “probe assembly” recited by Claim 1 (Office Action, pages 4 and 5). *Dunlap* appears to disclose that the contactor 202 serves to engage land pads of an integrated circuit die (*Dunlap*, column 4, lines 61-64, figures 8 and 9). *Dunlap* also appears to disclose that cabling ring 206 includes pins 209 for communicating power, ground and other electrical services to the contactor 202 (*Dunlap*, column 5, lines 1-8, figures 9 and 11). As indicated by the Examiner, and as clearly illustrated in figures 9 and 11 of *Dunlap*, the pins 209 of the cabling ring 206 of *Dunlap* are spaced farther apart, or configured having a “wider distribution,” than the pin groups 201 of the contactor 202 of *Dunlap* (i.e., the pins 209 are less densely packed relative to each other than the pin groups 201 of the contactor 202) (*Dunlap*, column 5, lines 15-17, figures 9 and 11). Thus, the pins 209 of the cabling ring 206 of *Dunlap* have a spacing density less than the spacing density of the pin groups 201 of the contactor 202 of *Dunlap*. In contrast, Claim 1 recites that the “spacing density of the probes of the probe assembly is greater than a spacing density of the probes of the support member” (emphasis added). Thus, for at least this reason, Applicants submit that *Dunlap* does not anticipate Claim 1.

Claim 9 recites “first probe means coupled to a support member and adapted to contact corresponding test areas on an electronic circuit assembly,” “support means coupled to the support member” and “second probe means coupled to the support means, the second probe

means having a spacing density of probes greater than a spacing density of probes of the first probe means” (emphasis added). Thus, for at least the reasons discussed above in connection with independent Claim 1, Claim 9 is also not anticipated by *Dunlap*.

Claims 3-8 and 10-13 that depend respectively from independent Claims 1 and 9 are also not anticipated by *Dunlap* at least because they incorporate the limitations of respective Claims 1 and 9 and also add additional elements that further distinguish *Dunlap*. Therefore, Applicants respectfully request that the rejection of Claims 1 and 3-13 be withdrawn.

Bardsley Reference

Of the claims rejected under the *Bardsley* reference, Claims 1 and 9 are independent. Applicants respectfully submit that *Bardsley* does not disclose or even suggest each and every limitation of independent Claims 1 and 9. For example, independent Claim 1 recites “a support member having a plurality of probes, each probe adapted to contact a corresponding test area of an electronic circuit assembly” and “a probe assembly coupled to the support member, the probe assembly having a plurality of probes, wherein a spacing density of the probes of the probe assembly is greater than a spacing density of the probes of the support member” (emphasis added).

Bardsley appears to disclose a test fixture having a printed circuit board 132 with a zero-insertion-force socket 34 attached thereto (*Bardsley*, abstract, lines 7-13, column 8, lines 22-40, figures 8 and 9). *Bardsley* also appears to disclose that the test fixture has pins 136 extending up through an interior cavity of the socket 134 to contact a device to be tested (*Bardsley*, abstract, lines 7-13, column 8, lines 22-40, figures 8 and 9). *Bardsley* also appears to disclose that the socket 134 includes pin inlets 138 for receiving the pins of the device to be tested (*Bardsley*, abstract, lines 7-13, column 8, lines 22-40, figures 8 and 9). In the Office Action, the Examiner appears to refer to the portion of the socket 134 of *Bardsley* having the pin inlets 138 as corresponding to the “support member having a plurality of probes” recited by Claim 1, and the Examiner appears to refer to the interior cavity of the socket 134 as corresponding to the “probe assembly coupled to the support member” as recited by Claim 1 (Office Action, page 6). The

Examiner appears to recognize a line illustrated in figures 8 and 9 of *Bardsley* (“note [sic] vertical line separating portions of 134 containing pins 138 from that containing pins 136 and 137”) (Office Action, page 6). However, the Examiner has apparently misconstrued the *Bardsley* reference as the “vertical line” referred to by the Examiner in an opening in the center portion of the socket 134. Accordingly, the opening in the socket 134 is clearly not “a probe assembly coupled to the support member” as recited by Claim 1. Therefore, for at least this reason, *Bardsley* does not anticipate Claim 1.

Further, the pins 136/137 of *Bardsley* appear to be spaced a greater distance apart than the pin inlets 138 referred to by the Examiner (*Bardsley*, figure 9). Thus, Applicants submit that the pins 136/137 of *Bardsley* have a spacing density less than the spacing density of the pin inlets 138. In contrast, Claim 1 recites that the “spacing density of the probes of the probe assembly is greater than a spacing density of the probes of the support member” (emphasis added). Thus, for at least this reason also, Applicants submit that *Bardsley* does not anticipate Claim 1.

Claim 9 recites “first probe means coupled to a support member and adapted to contact corresponding test areas on an electronic circuit assembly,” “support means coupled to the support member” and “second probe means coupled to the support means, the second probe means having a spacing density of probes greater than a spacing density of probes of the first probe means” (emphasis added). Thus, for at least the reasons discussed above in connection with independent Claim 1, Claim 9 is also not anticipated by *Bardsley*.

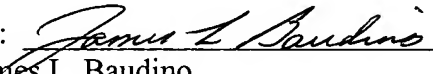
Claims 2-8 and 10-13 that depend respectively from independent Claims 1 and 9 are also not anticipated by *Bardsley* at least because they incorporate the limitations of respective Claims 1 and 9 and also add additional elements that further distinguish *Bardsley*. Therefore, Applicants respectfully request that the rejection of Claims 1 and 3-13 be withdrawn.

CONCLUSION

Applicants have made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request reconsideration and full allowance of all pending claims.

No fee is believed due with this Response. If, however, Applicants have overlooked the need for any fee due with this Response, the Commissioner is hereby authorized to charge any fees or credit any overpayment associated with this Response to Deposit Account No. 08-2025 of Hewlett-Packard Company.

Respectfully submitted,

By: 
James L. Baudino
Reg. No. 43,486

Date: December 5, 2005

Correspondence to:
L.Joy Griebenow
Hewlett-Packard Company
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400
Tel. 970-898-3884